

## Solicitation NNG15543785Q Responses

1. Table 1-1 requirement #4: Is the requirement for an identical number of rows and columns (e.g., 1000 x 1000) strict? Would a sensor with a similar overall pixel resolution but a different aspect ratio (e.g., 1280 x 720) be acceptable?

**Answer:** The aspect ratio or the specific number of pixels in each row and column is not a driver; only the total number of pixels. Therefore, a 1280 x 720 pixel detector resolution is just shy of one million pixels, so it would not meet our intended resolution requirement. However, if a 1 MP cannot fit in the mechanical envelope specified (see questions two and three), then GSFC is willing to consider the option of a lower pixel resolution.

2. Table 1-2, requirements #13, #14, and #19: How rigid are the dimension specifications in these requirements?

**Answer:** GSFC should have noted the following in the SOW: The mechanical packaging constraints on dimension are our top level, minimum requirements.

3. We wanted to ask about the possibility to slightly enlarge these dimensions according to the following priorities:

- a. Requirement #14: Maximum length of camera head:

**Answer:** As stated in the answer to question two, our mechanical envelope is the most strict requirement. GSFC is willing to consider the option of having an overall camera head length of 9mm if the outer diameter of the camera head stays at 8mm, as specified.

- b. Requirement #13: Maximum Outer Diameter (OD) of the camera head:

**Answer:** As stated in the answer to question two, our mechanical envelope is the most strict requirement. GSFC is willing to consider the option of having an Outer Diameter of 9mm if the overall length of the camera head can be reduced to 7mm, from the 8mm specified.

- c. Requirement #19: Maximum OD of the camera head harness bundle:

**Answer:** The Maximum OD of the camera head harness bundle must stay at 3.5 mm or less. However, GSFC may consider the option of relaxing requirements #12 and #21 to allow a smaller gauge electrical wire than the 32 AWG specified in order to make the overall harness bundle meet the stated requirement.

4. As a minor comment, please note that in the Statement of Work, the comment marked with \*\*, the reference should be to requirement #13 and not #14.

**Answer:** That is correct. This is a typo. The double asterisk comment after Table 1-2 should refer to requirement number 13, not 14.

5. Concerning Section 5: Schedule, we notice that all items are scheduled either relative to the schedule of the order or to the schedule of the deliverable items, which have an absolute latest date. Therefore, we wanted to ask about the approximate schedule of the order, in order to assess the time period for these two milestones.

**Answer:** The government is under no obligation to make a selection and award a contract in reference to this solicitation. However, if it exercises the option to, it is assumed that a selection will be announced within 30 days of the solicitation closing date (April 2<sup>nd</sup>, 2015).

6. There was a nuance in the definition of the communication protocol that we wanted to clarify whether it should be noted explicitly in the proposal. Per requirement #10 in Table 1-1 in the Statement of Work, LVDS is stated as the camera video physical layer. There are sensors that exist that use interfaces based on LVDS, but differ in the type communications protocol that flows over this physical layer. Would any communications protocol be considered as long as the underlying physical layer is LVDS?

**Answer:** GSFC does not have a specific requirement for the type of communications protocol utilized by the miniaturized camera head. All proposed communication protocols will be considered as long as they flow over the LVDS physical layer. However, it is essential that any proposers specify the exact type of communication protocol that is being proposed in their solicitation response. If possible GSFC would like to avoid some of the more complicated interfaces that exist in industry such as the Mobile Industry Processor Interface (MIPI). Interfaces such as these would add an additional level of complexity to the GSFC hardware intended to interface with the miniaturized camera that GSFC is not prepared to support.